



New Jersey Department of Environmental Protection
Water Resource Management
Division of Water Monitoring and Standards

Summary of Stakeholder Meeting: Surface Water Quality Standards

December 8, 2015 (9:30 AM – 11:30 AM)

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The New Jersey Department of Environmental Protection (Department) hosted an invitation-only stakeholder meeting on December 8th 2015. This was a follow-up to the stakeholder meeting held on April 15 2015 where contemplated revisions to the Department's surface water quality standards (SWQS) were discussed. These revisions are required per the Clean Water Act's provision of Triennial review and also to incorporate the Environmental Protection Agency's (EPA) recent revisions to its recreational and freshwater ammonia criteria. States have three years to adopt EPA recommendations.

The following anticipated revisions to New Jersey's SWQS were presented:

- (1) Recreational criteria for fresh and marine primary contact waters of the state based on EPA's 2012 revised recreational criteria;
- (2) Freshwater Ammonia criteria based on EPA's 2013 revisions;
- (3) Updates to the SWQS to be consistent with EPA's revised National Water Quality Standards Regulation (40 C.F.R. 131); and
- (4) Addition of general policy language to protect downstream uses and minor edits to nutrient criteria statement to be consistent with the nutrient policy.

A copy of the presentation and summary of the meeting will be posted at <http://www.nj.gov/dep/workgroups/>.

The presentation included a brief background of the Division of Water Monitoring and Standards and Bureau of Environmental Analysis Restoration and Standards and their responsibilities. It also included the reasons for considering the revisions. Each of the four main contemplated revisions ensued with discussion and/or questions.

RECREATIONAL CRITERIA:

The Department presented EPA's recreational water quality criteria (<http://www.epa.gov/sites/production/files/2015-10/documents/rwqc2012.pdf>), the various options which EPA has provided to the states and the Department's preferences. All options recommended are tentative and stakeholder input is encouraged. The Department is inclined towards using the 36 illness rate for all primary contact waters of the State. For indicator organisms, the Department plans on continuing with using enterococci in primary contact marine waters and E.

Coli in primary contact fresh waters since it has been established by prior justification that E. Coli and enterococci serves as better fecal indicators in fresh (salinity < 3.5 ppt) and marine waters respectively (See September 19, 2005 rule proposal which can be found at http://www.state.nj.us/dep/wms/bears/support_docs.htm). It was suggested that enterococci be used as an indicator organism for both fresh and marine waters.

EPA has recently provided States with the option of choosing a 90-day duration in lieu of 30 days for the recreational criteria. Advantages and disadvantages of the durations were discussed and stakeholders were requested to provide input. Several suggestions were made: (1) a 90-day duration should be used, where data is available since a longer duration would be more representative of the recreational season; (2) monitoring should be done on a different month each year; and (3) 30-day duration would be more practical from a resource point of view.

A 30-day duration period is anticipated by the Department because (1) it is the optimal duration recommended by EPA; (2) both 36 and 32 illness rates are equally protective with the inclusion of the new measure, the statistical threshold value (STV); and (3) potential monitoring resource limitations. The criteria would be applicable throughout the year. All these options are consistent with existing criteria and the current practice may be continued. Since EPA has not finalized the preliminary findings of risk factors for primary and secondary contact being identical, no changes are being proposed to secondary contact recreational criteria except the introducing the application of 30 day duration for comparing to the standards. It was clarified at the meeting that if EPA finalizes the determination that primary and secondary contact risk levels are the same, then EPA's recreational criteria will replace the pathogen criteria in the downgraded waters.

There may not be any significant changes to NJPDES permits except, if and when guidance is available to implement STV another limit may be added to permits. There was also a concern regarding using STV as a measure, in particular the NY/NJ Harbor waters. This is a common issue not only for the states having CSOs but also for all states which has urban development in the watersheds. While the concern has been conveyed to EPA previously, EPA had indicated that STVs must be included as part of the revisions to recreational criteria.

AMMONIA CRITERIA:

The Department presented EPA's 2013 freshwater Ammonia criteria which are based on more sensitive mussels and gill breathing snails than species used to derive the Department's existing freshwater ammonia criteria. Criteria are applicable to all freshwaters and applicable year-round. EPA's criteria equations are temperature, pH and species dependent. Since EPA's criteria are applicable for pH > 6.5, ammonia criteria will not change for Pinelands waters (pH < 5.5). The extent of the waterbody to be used for verification of presence (or absence) of most sensitive species pertaining to the ammonia criteria was discussed. Mussels and gill breathing snails belonging to the genus of the species used for ammonia criteria development are assumed to be present in New Jersey and it is almost impossible to prove their absence in a particular waterbody. The sensitive species used in the EPA's 2013 Ammonia criteria development may not be present in New Jersey but mussels and gill breathing snails are prevalent in New Jersey. Questions were raised as to what is the fall back criteria when mussels and gill breathing snails are proven absent. EPA discusses a hierarchy of recalculation options in *Flexibilities for States Applying EPA's Ammonia Criteria Recommendations* which can be found at <http://www.epa.gov/sites/production/files/2015-08/documents/flexibilities-for-states-applying-epa-s-ammonia-criteria-recommendations.pdf>. It was pointed out that while EPA's ammonia criteria at higher temperatures are more stringent than the

existing criteria, many of the dischargers already have more stringent ammonia WQBELs which is based on dissolved oxygen and not the ammonia criteria itself. Hence the more stringent EPA criteria may not affect a lot of dischargers. The Department will evaluate the permits to determine the impact on the dischargers and may be discussed in the rule proposal.

Since treating ammonia to a lower concentration may result in increase in the nitrate in the effluent, impacts on nitrate in the receiving waters was discussed. It was indicated that currently there are no exceedances of ammonia criteria in New Jersey waters; therefore freshwaters will continue to attain the proposed EPA's ammonia criteria based on existing data.

EPA WATER QUALITY REGULATIONS AND VARIANCES:

EPA's Final Water Quality Standards Regulatory Revisions (<http://www.epa.gov/wqs-tech/final-rulemaking-update-national-water-quality-standards-regulation>) became effective on October 20, 2015. EPA revised several sections such as, administrative determination, designated uses, triennial review, antidegradation, WQS variance, and compliance schedules. The Department is proposing to revise New Jersey's SWQS to be consistent with EPA's WQS updates. The primary areas where SWQS will be updated are related to variance and use attainability analysis (UAA) applicability. EPA's has redefined the WQS variance and introduced flexibilities such as allowing use of technology limits to define effluent conditions or highest attainable conditions, allowing states to define variance duration greater than 3 years etc. More details about EPA revisions can be found at <http://www.epa.gov/wqs-tech/final-rulemaking-update-national-water-quality-standards-regulation>. The Department's existing variance policies can be found at N.J.A.C. 7:9B-1.8, 9, and 10 (<http://www.nj.gov/dep/rules/>).

EPA has specified WQS variance as the criteria and use for a given time and waterbody, must meet highest attainable condition, must be evaluated every 5 years and submitted to EPA, and only applicable to NJPDES permits and not for assessing 303(d) list of waters. EPA indicates that WQS variance must be part of WQS, must be approved EPA, the adoption process should include public participation process, attorney general certification and must be reviewed by EPA as part of triennial review. In response to a comment/question raised, the Department indicated that there are no variances in New Jersey because of the three year time limit in the existing SWQS rules.

DOWNSTREAM PROTECTION AND NUTRIENT CRITERIA FOR STREAMS AND LAKES:

The Department shared with the stakeholders that EPA recommends incorporating a general policy into the SWQS to protect downstream uses. Downstream protection is already being practiced by the Department, either during assessment of State waters or TMDL/restoration development. However, it is not codified. The policy language to be included in the SWQS is still under discussion with EPA. Revisions to nutrient criteria statements to be consistent with the nutrient policy are also under consideration.

Stakeholders were informed that the presentation and a summary of the meeting will be posted on the web at <http://www.nj.gov/dep/workgroups/>. Stakeholders were encouraged to contact Kimberly Cenno at kimberly.cenno@dep.nj.gov with informal written comments and recommendations.

OTHER SUPPORTING DOCUMENTS

Relevant information regarding EPA Recreational Water Quality Criteria can be found at <http://www.epa.gov/wqc/2012-recreational-water-quality-criteria-documents>

Relevant information regarding EPA ammonia criteria can be found at <http://water.epa.gov/scitech/swguidance/standards/criteria/aqlife/ammonia/>.

Relevant information regarding New Jersey ammonia criteria can be found at:

- http://www.nj.gov/dep/rules/rules/njac7_9b.pdf
- http://www.state.nj.us/dep/wms/bwqsa/support_docs.htm.

Relevant information regarding EPA Final Water Quality Standards Regulatory Revisions can be found at <http://www.epa.gov/wqs-tech/final-rulemaking-update-national-water-quality-standards-regulation>.